

WHAT IS CLAIMED IS :

1 1. A method for providing speech-enabled application programs comprising:
2 responsive to an input string, selecting from one or more natural language variants
3 a prospective variant that most resembles the input string; and
4 identifying a natural language exemplar via a mapping between the exemplar and
5 the prospective variant.

1 2. The method of claim 1, wherein the mapping comprises:
2 mapping the one or more natural language variants with at least one natural
3 language exemplar.

1 3. The method of claim 2, wherein the prospective variant corresponds to at least
2 one natural language exemplar.

1 4. The method of claim 1, further comprising:
2 executing an action instruction associated with the identified natural language
3 exemplar.

1 5. The method of claim 1, further comprising:
2 mapping a plurality of action instructions with a plurality of natural language
3 exemplars, wherein each action instruction is associated with at least one natural
4 language exemplar.

1 12. The method of claim 11, further comprising:
2 if the user does not accept that the adapted exemplar expresses the action desired
3 by the user, selecting from the one or more natural language variants an alternative
4 prospective variant that most resembles the input string; and
5 identifying a natural language exemplar via a mapping between the exemplar and
6 the alternative prospective variant.

1 13. The method of claim 12, further comprising:
2 executing an action instruction associated with the identified natural language
3 exemplar.

1 14. The method of claim 2, further comprising:
2 storing one or more natural language variants mapped to at least one natural
3 language exemplar in a memory.

1 15. The method of claim 14, wherein at least one natural language variant is input by
2 a user.

1 16. The method of claim 14, wherein at least one natural language variant is input by
2 an application developer.

1 17. The method of claim 14, wherein the at least one natural language exemplar is
2 input by an application developer.

1 18. The method of claim 14, wherein the at least one natural language exemplar is
2 produced automatically by a natural language generator.

1 19. The method of claim 14, further comprising:
2 producing at least one natural language variant by automatically generating
3 paraphrases of the natural language exemplar.

1 20. The method of claim 1, further comprising:
2 loading an active context file relating to a service accessed by a user, the active
3 context file containing the one or more natural language variants and the natural language
4 exemplar.

1 21. The method of claim 1, further comprising:
2 comparing the input string with the one or more natural language variants.

1 22. The method of claim 1, wherein the input string is input by at least one of a
2 keyboard, handwriting recognition device, a dial pad, and a speech recognition device.

1 23. A system for providing speech-enabled application programs comprising:
2 a voice recognizer to receive an input string and produce a recognized input
3 string;
4 a memory to store one or more natural language variants corresponding to at least
5 one natural language exemplar; and

6 a processor to:
7 select from the one or more natural language variants a prospective variant
8 that most resembles the received recognized input string; and
9 identify the at least one natural language exemplar corresponding to the
10 prospective variant.

1 24. The system of claim 23, further comprising:
2 a controller adapted to execute an action instruction associated with the identified
3 natural language exemplar corresponding to the prospective variant.

1 25. The system of claim 23, the processor adapted to map a plurality of action
2 instructions with a plurality of natural language exemplars, wherein each action
3 instruction is associated with at least one natural language exemplar and the memory to
4 store the mapped action instructions.

1 26. The system of claim 25, the processor adapted to further generate a mapping
2 function that specifies a difference between the received recognized input string and the
3 prospective variant.

1 27. The system of claim 26, the processor adapted to apply the mapping function to
2 the action instruction associated with the identified natural language exemplar mapped to
3 the prospective variant to produce an adapted action instruction.

3 applying the mapping function to the action instruction associated with the
4 identified natural language exemplar to produce an adapted action instruction.

1 39. The machine-readable medium of claim 38 having stored thereon further
2 executable instructions for performing a method comprising:

3 executing the produced adapted action instruction.

1 40. The machine-readable medium of claim 37 having stored thereon further
2 executable instructions for performing a method comprising:

3 applying the mapping function to the identified natural language exemplar to
4 produce an adapted exemplar.

1 41. The machine-readable medium of claim 40 having stored thereon further
2 executable instructions for performing a method comprising:

3 forwarding the adapted exemplar to a user to confirm whether the user desires an
4 adapted action corresponding to the adapted exemplar.

1 42. The machine-readable medium of claim 41 having stored thereon further
2 executable instructions for performing a method comprising:

3 executing the adapted action if the user confirms that an adapted exemplar
4 expresses the action desired by the user.

1 47. The method of claim 46, further comprising:
2 storing the created variant in a customized context file, wherein during service
3 access by a user the personalized context file is uploaded by the speech-enabled service
4 allowing the user to express the desired action using the created variant.

1 48. The method of claim 45, wherein the context file is accessed using a web browser.

1 49. The method of claim 45, wherein the context file is accessed using a telephone.

1 50. A system for providing speech-enabled application programs comprising:
2 a memory to store one or more natural language variants corresponding to a
3 natural language exemplar; and
4 a processor to:
5 select from the one or more natural language variants a prospective variant
6 that most resembles an input string; and
7 identify a natural language exemplar via a mapping between the exemplar
8 and the prospective variant.

1 51. The system of claim 50, further comprising:
2 a voice recognizer to receive the input string and produce a recognized input
3 string.

1 52. The system of claim 50, further comprising:

2 a controller adapted to execute an action instruction associated with the identified
3 natural language exemplar.

1 53. The system of claim 50, the processor adapted to map the one or more natural
2 language variants with the natural language exemplar.

1 54. The system of claim 50, the processor adapted to map a plurality of action
2 instructions with a plurality of natural language exemplars, wherein each action
3 instruction is associated with at least one natural language exemplar and the memory to
4 store the mapped action instructions.

1 55. The system of claim 51, the processor adapted to generate a mapping function that
2 specifies a difference between the recognized input string and the prospective variant.

1 56. The system of claim 55, the processor adapted to apply the mapping function to
2 an action instruction associated with the identified natural language exemplar to produce
3 an adapted action instruction.

1 57. The system of claim 56, further comprising:
2 a controller adapted to execute the produced adapted action instruction.

1 58. The system of claim 57, further comprising:

2 an output synthesizer to present a result of the executed instruction by providing
3 data that can be presented to an audio or visual terminal device .

1 59. The system of claim 58, wherein the output synthesizer is at least one of a display
2 format and a speech synthesizer.

1 60. The system of claim 50, further comprising:
2 an input device to generate the input string.

1 61. The system of claim 60, wherein said input device is at least one of a keyboard,
2 handwriting recognition device, a dial pad, and a speech recognition device.